

**Department of Environmental Quality**  
**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION**  
**GENERAL INSTRUCTIONS**

The following is designed to provide the applicant information regarding the requirements for obtaining a Virginia Pollution Abatement (VPA) Permit and guidance for the preparation of the application. The VPA Permit application is comprised of four parts (Forms A-D) to be submitted in accordance with the following instructions:

1. **Form A** must be submitted when an owner makes application to the Department of Environmental Quality (DEQ) for approval of any pollutant management activity, including facilities that manage pollutants, where there is reasonable potential for an adverse water quality impact should a discharge occur from that activity. This includes potential or actual discharges, but not point source discharges of pollutants to surface waters authorized by a Virginia Pollutant Discharge Elimination System (VPDES) Permit.

2. The following forms must also be completed, as applicable, based on the type of pollutants being managed:

- FORM B:** Animal Waste
- FORM C:** Industrial Waste
- FORM D:** Municipal Effluent and Biosolids

A preliminary meeting between the applicant and the DEQ staff may be arranged prior to completing the application for a VPA Permit. The applicant is advised to first contact the Regional Office to determine if a meeting is necessary. During or after the preliminary meeting, DEQ staff will advise the applicant if a permit is required and, as applicable, which forms must be completed. In some cases, it may be necessary for the applicant to complete Form A before DEQ staff can determine what additional forms will be necessary.

**DEQ reserves the right to request additional information such as groundwater monitoring plans, background monitoring data, sampling regimes, etc., not directly requested by the applications, if, in its discretion, a facility or operation poses a potential impact to water quality.**

## LIST OF ACRONYMS

<b>AW</b>	<i>Animal Waste</i>
<b>CEC</b>	<i>Cation Exchange Capacity</i>
<b>CCE</b>	<i>Calcium Carbonate Equivalency</i>
<b>CFR</b>	<i>Code of Federal Regulations</i>
<b>CWA</b>	<i>The Clean Water Act, as amended (The Act)</i>
<b>DEQ</b>	<i>Department of Environmental Quality</i>
<b>DCR</b>	<i>Department of Conservation and Recreation, Division of Soil and Water Conservation</i>
<b>DWM</b>	<i>DEQ, Division of Waste Management</i>
<b>EPA</b>	<i>U.S. Environmental Protection Agency</i>
<b>MBAS</b>	<i>Methylene Blue Active Substances</i>
<b>NMP</b>	<i>Nutrient Management Plan</i>
<b>NRCS</b>	<i>USDA, Natural Resource Conservation Service</i>
<b>O&amp;M</b>	<i>Operations and Maintenance</i>
<b>PAN</b>	<i>Plant Available Nitrogen</i>
<b>PCB</b>	<i>Polychlorinated Biphenyls</i>
<b>PN</b>	<i>Public Notice</i>
<b>POTW</b>	<i>Publicly Owned Treatment Works</i>
<b>PVOTW</b>	<i>Privately Owned Treatment Works</i>
<b>RCRA</b>	<i>Resource Conservation and Recovery Act</i>
<b>RO</b>	<i>Regional Office (ROs, plural)</i>
<b>SIC</b>	<i>Standard Industrial Classification</i>
<b>STP</b>	<i>Sewage Treatment Plant</i>
<b>SWCB</b>	<i>State Water Control Board</i>
<b>TOD</b>	<i>Total Oxygen Demand</i>
<b>UIC</b>	<i>Underground Injection Control</i>
<b>USDA</b>	<i>U.S. Department of Agriculture</i>
<b>VDH</b>	<i>Virginia Department of Health</i>
<b>VPA</b>	<i>Virginia Pollution Abatement</i>
<b>VPDES</b>	<i>Virginia Pollutant Discharge Elimination System</i>
<b>VPI &amp; SU</b>	<i>Virginia Polytechnic Institute and State University</i>

## GLOSSARY

**ACTIVITY** - see Facility and Pollutant management activity.

**ADMINISTRATIVELY COMPLETE** - an application is considered to be administratively complete when it is verified that an original and one copy of the appropriate VPA application forms have been submitted with all necessary blanks accurately filled in and the proper signature applied; and the SCC Certificate and/or the DSWC approved NMP is attached, if respectively required.

**AGRONOMIC RATE** - the rate of land application of wastewater or waste based upon the Plant Available Nitrogen (PAN) requirement of the crops on site.

**ANIMAL UNITS** - a means of determining the size of an animal feeding operation (which does not otherwise meet the Concentrated or Intensified criteria) by adding the following numbers:

- 1.0 times the number of slaughter and feeder cattle, plus
- 1.4 times the number of mature dairy cattle (milking or dry), plus
- 0.4 times the number of swine each weighing over 25 kilograms (approx. 55 pounds), plus
- 2.0 times the number of horses, plus
- 0.1 times the number of sheep or lambs, plus
  - the number of turkeys divided by 55, plus
  - the number of laying hens or broilers divided by 100, plus
  - for each type of animal not listed above, the number of animals confined times their average weight, divided by 1000 pounds.

**ANIMAL FEEDING OPERATION** - a lot or facility together with any associated treatment works where the following conditions are met:

1. Animals have been, are or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period; and
2. Crops, vegetation forage growth or post harvest residues are not sustained over any portion of the operation of the lot or facility.

Two or more animal feeding operations under common ownership are considered to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of waters.

**ANIMAL SLUDGE MANAGEMENT PLAN** - a Nutrient Management Plan (NMP).

**CLEAN WATER ACT (CWA)** - (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Public Laws 95-217, 96-483, 97-117, 33 U.S.C. 1251, et seq.

**CONCENTRATED ANIMAL FEEDING OPERATION** - an animal feeding operation which requires a treatment works to store wastewater or otherwise prevent a point source discharge of wastewater pollutants to State waters from the animal feeding operation, except in the case of a 25 year-24 hour or greater storm event, and where more than the following number and types of animals are confined:

1. 1,000 slaughter and feeder cattle
2. 700 mature dairy cattle (whether milked or dry cows)
3. 2,500 swine each weighing over 25 kilograms (approximately 55 pounds)
4. 500 horses
5. 10,000 sheep or lambs
6. 55,000 turkeys
7. 100,000 laying hens or broilers
8. 1,000 animal units

**CONSENT DECREE** - a unilateral instruction by a judge to the parties involved (this may or may not involve DEQ).

**CONSENT ORDER** - an administrative action of DEQ directed to a permittee.

**DRAFT PERMIT** - a document indicating the tentative decision to issue, modify or reissue a permit, or revoke an NDC and issue a VPA permit. A notice of intent to deny is a type of draft permit which must follow the same procedures as any draft permit.

**EXCEPTIONAL QUALITY BIOSOLIDS** - biosolids that have received an established level of treatment for pathogen control and vector attraction reduction and contain known levels of pollutants, such that they may be marketed or distributed for public use in accordance with this regulation.

**FACILITY OR ACTIVITY** - any VPA facility (including land or appurtenances thereto) or activity subject to regulation under the VPA program.

**FREQUENT APPLICATION** - land application of wastewater or sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year (1/3) period.

**INDUSTRIAL FACILITY** - an establishment engaged as an economic unit, generally at a single location, where business is conducted, services or industrial operations performed and in which raw materials are changed into useful products.

**INDUSTRIAL WASTE** - liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

**INFREQUENT APPLICATION** - land application of wastewater or sludge up to the agronomic rate at a frequency of once in a 3 year period.

**INTENSIFIED ANIMAL FEEDING OPERATION** - an animal feeding operation at which treatment works are required to store wastewater or otherwise prevent a point source discharge of wastewater pollutants to State waters from the feeding operation except in the case of a 25 year-24 hour or greater storm event and where less than or equal to 1,000 animal units but more than the following number and type of animals are confined:

1. 300 slaughter and feeder cattle
2. 200 mature dairy cattle (whether milked or dry cows)
3. 750 swine each weighing over 25 kilograms (approximately 55 pounds)
4. 150 horses
5. 3,000 sheep or lambs
6. 16,500 turkeys
7. 30,000 laying hens or broilers
8. 300 animal units

**LAND APPLICATION** - the introduction of animal waste, wastewaters or sludge into or onto the ground for treatment or reuse.

**MUNICIPAL FACILITIES** - Publicly Owned Treatment Works (POTW), a house, store, school, subdivision or other entity with a treatment facility that receives and treats wastewater from primarily domestic sources.

**MUNICIPALITY** - a city, town, county, district, association, authority, other public body created by or under State law and having jurisdiction over disposal of sewage, industrial, or other wastes; an Indian tribe or an authorized Indian tribal organization; a designated and approved management agency under section 208 of CWA.

**MUNICIPAL WASTE** - effluent or sewage sludge from a municipal facility.

**NITROGEN** - an element of matter and an essential nutrient often present in wastewater as ammonia, nitrate, nitrite and organic nitrogen.

**NON-PROCESS WASTEWATER** - water that does not come in contact with products, by-products, waste, or wastewater (e.g. non-contact cooling water).

**NUTRIENTS** - any substance used by organisms that promotes growth; generally applied to nitrogen and phosphorus in wastewater.

**OTHER WASTE** - decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals and all other substances, except industrial wastes and sewage, which may cause pollution in any State waters.

**PERSON** - any firm, corporation, association or partnership, one or more individuals, or any governmental unit or agency thereof.

**PLANT AVAILABLE NITROGEN (PAN)** - the amount of nitrogen available to the crop for the current growing season. The PAN is based upon the characteristics of the nitrogen source applied to the crops and the method of application to the cropping site.

**pH** - a measure of the hydrogen ion concentration in a solution. On the pH scale of 0 to 14, a value of 7 at 25 degrees C represents a neutral condition.

**PHOSPHORUS** - an element of matter and an essential nutrient found in orthophosphate, pyrophosphate, tripolyphosphate and organic phosphate forms.

**POLLUTANT** - any substance, radioactive material or heat which causes or contributes to, or may cause or contribute to pollution.

**POLLUTANT MANAGEMENT ACTIVITY** - any activity under the Law and the VPA Permit Regulation, including storage and recycle, which involves a pollutant and is not a point source discharge to surface waters.

**POLLUTION** - such alteration of the chemical, physical or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable

uses.

**PRIVATELY OWNED TREATMENT WORKS (PVOTW)** - any sewage treatment works not publicly owned.

**PROCESS WASTEWATER** - any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

**PUBLICLY OWNED TREATMENT WORKS (POTW)** - any sewage treatment works that is owned by a State or municipality. Sewers, pipes, or other conveyances are included in this definition only if they convey wastewater to a POTW providing treatment.

**REISSUANCE** - internal DEQ term that refers to the process by which a VPA permit is issued again to the permittee.

**REVOCAION** - the act of discontinuing the certification of a facility or activity authorized by an NDC. Revocation may require the simultaneous issuance of a VPA permit if the facility or activity is subject to regulation under the VPA program.

**SEWAGE** - water-carried and nonwater-carried human excrement, kitchen, laundry, shower, bath or lavatory wastes, separately or together with such underground, surface, storm and other water and liquid industrial wastes as may be present from residences, buildings, vehicles, industrial establishments or other places.

**SHALL** - indicates a mandatory requirement.

**SHOULD OR MAY** - indicates a recommendation.

**STANDARD INDUSTRIAL CLASSIFICATION (SIC)** - is the classification of establishments by type of activity in which they are engaged. The SIC codes are listed in the Standard Industrial Classification (SIC) Manual published by the U.S. Department of Labor, Occupational Safety and Health Administration. The SIC Manual is available at most public libraries or on the internet.

**SUBSURFACE INJECTION** - land application of (1) liquid sludge which is injected into the plow layer; (2) sludges incorporated into the soil on the same day of application onto the soil surface.

**VIRGINIA POLLUTION ABATEMENT (VPA) PERMIT** - a document issued by DEQ pursuant to the VPA Permit Regulation which, under prescribed conditions, authorizes the management of pollutants or activities that are not authorized by VPDES Permits. Activities for which a VPA Permit may be issued include, but not limited to, land application of wastewater, biosolids (or sewage sludge) or septage; and reclamation and reuse of wastewater.

## APPLICATION FORMAT

### General

A VPA Permit application must contain completed Form A, other completed forms (i.e., B, C or D) that apply to the existing or proposed pollutant management activity, and any necessary attachments. Omission of requested information on the forms may be cause to return the application as incomplete. Insert "N/A" in all blanks which do not apply.

An application is to be submitted on the forms provided with additional sheets attached, as necessary. Additional sheets should be submitted on pages 8-1/2" x 11" in size. If it is necessary to use larger size papers, they are to be folded to 8-1/2" x 11" with a minimum of fold-ins. Fold-ins from more than one side should be avoided. The size limitation does not apply to construction drawings. Attachments should clearly identify the part/question of the application form to which they pertain.

It is important that drawings, diagrams, charts, maps and other illustrative material be clear originals or reproductions. Reductions of large-size illustrative material to fit 8-1/2" x 11" paper size are acceptable provided the information and details of the reduced document remain legible or clear without magnification.

Photographs used in an application should be clear and labeled with the project name, the applicant's name and a brief description of the picture on each photograph. .

Each item of illustrative material should be labeled to identify it as part of the application. Pages of both illustrative and written material are to be numbered to facilitate making references to the application, or to sections of it.

The application may be bound either on the left side, or at the top.

### Maps

All maps should be clear, legible and of sufficient scale to show the required features with the site boundaries clearly marked. A map scale of 1" = 660' is preferred and maps should be provided on 8-1/2" x 11" or folded 11" x 17" paper. If different colors are used to depict map features, please provide the required number of colored copies. **A North arrow and map scale must appear on each map.**

The requirement for a site plan map and topographic map may be met with one combined map if the topography of the site is relatively flat and the landscape features can be clearly shown.

The symbols or designators used to show the locations of different landscape features or delineations of different soil series should be as similar to USGS and USDA standards as possible.

## APPLICATION SUBMITTAL

A completed application with original signatures on the certification statements and at least one copy of the completed application shall be submitted to the DEQ Regional Office (RO) covering the location of the pollution management activity to be permitted. For certain pollutant management activities, the VDH must also review the application. The following table specifies the number of applications that must be submitted to each agency for each category of pollutant management activity. Submit to the DEQ RO the total number of applications required for both DEQ and VDH for the category of pollutant management activity that applies to the project.

Category of Pollutant Management Activity	DEQ-RO	VDH
Industrial Waste	2	1 <sup>a</sup> .
Land application of Municipal Effluent and Biosolids	3 <sup>b</sup> .	1 <sup>c</sup> .
Animal Waste (animal feeding operations & confined poultry feeding operations) <sup>d</sup>	2	1 <sup>e</sup> .
Other Pollutant Management Activities (i.e., storage facilities, rapid infiltration basins, sewage sludge composting, stabilized septage land application, etc.)	3 <sup>f</sup> .	1 <sup>g</sup> .

<sup>a</sup>. When Part C-1 (Form C) of the VPA permit application indicates that there is or will be a municipal waste contribution to the industrial waste stream, submit 1 copy of the permit application to the DEQ RO specifically for VDH review, in addition to other copies to the DEQ-RO.

<sup>b</sup>. When the application includes a non-discharging treatment works of sewage or municipal wastewater other than or in

addition to land application sites for municipal effluent or biosolids, submit 3 copies of the permit application to the DEQ RO.

- c. For pollutant management activities that involve new or existing sewage or municipal wastewater treatment works, submit 1 copy of the permit application to the DEQ RO specifically for VDH review, in addition to other copies submitted to the DEQ-RO.
- d. Applicable only to animal waste pollutant management activities that do not qualify for either the VPA General Permit for animal feeding operations (9VAC25-192) or the VPA General Permit for poultry waste management (9VAC25-630).
- e. For only animal waste pollutant management activities located below the fall zone or east of Interstate 95 in Virginia, submit 1 copy of the permit application to the DEQ RO specifically for VDH review, in addition to other copies to the DEQ-RO.
- f. For pollutant management activities that involve the composting of sewage sludge, submit 3 copies of the permit application to the DEQ RO.
- g. For pollutant management activities that involve the land application of stabilized septage, submit 1 copy of the permit application to the DEQ RO specifically for VDH review, in addition to other copies to the DEQ-RO.

The addresses for DEQ Regional Offices are attached.

#### **DCR APPROVAL LETTERS FOR NUTRIENT MANAGEMENT PLANS**

In order to be authorized by a VPA permit, there are specific pollutant management activities that require a nutrient management plan (NMP) prepared by a DCR certified nutrient management planner to be submitted with the permit application. For the following activities, the NMP must also be reviewed and approved by the DCR and a copy of DCR's approval letter for that NMP submitted in the permit application:

1. Biosolids land application where the application site:
  - a. Is operated by an owner or lessee of a confined animal feeding operation as defined in subsection A of § 62.1-44.17.1, or a confined poultry feeding operation as defined in subsection A of § 62.1-44.17.1.1 of the Code of Virginia;
  - b. Will receive applications of biosolids more frequently than once every three years at greater than 50 percent of the annual agronomic rate; and
  - c. Has site-specific conditions that may increase the risk of adverse impacts state waters resulting from biosolids land application.
2. Animal waste pollutant management activities that involve the land application of animal waste for agricultural production.

#### **APPLICATION PROCESSING**

DEQ staff shall review the application for completeness. Applicants who have failed to submit a complete application will be requested by DEQ staff in writing to furnish such information as is necessary to complete the application. **If this information is not provided by the applicant, processing of the application may be suspended.**

**DEPARTMENT OF ENVIRONMENTAL QUALITY REGIONAL OFFICES**

**TIDEWATER REGIONAL OFFICE**

5636 Southern Blvd.  
Virginia Beach, VA 23462  
(757) 518-2000  
(757) 518-2103 (fax)

**SOUTH CENTRAL REGIONAL OFFICE**

7705 Timberlake Road  
Lynchburg, VA 24502  
Phone: (434) 582-5120  
Fax: (434) 582-5125

**PIEDMONT REGIONAL OFFICE**

4949-A Cox Road  
Glen Allen, VA 23060  
(804) 527-5020  
(804) 527-5106 (fax)

**WEST CENTRAL REGIONAL OFFICE**

3019 Peters Creek Road  
Roanoke, VA 24019  
(540) 562-6700  
(540) 562-6725 (fax)

**VALLEY REGIONAL OFFICE**

4411 Early Road  
Mailing address P.O. Box 3000  
Harrisonburg, VA 22801  
(540) 574-7800  
(540) 574-7844 (fax)

**SOUTHWEST REGIONAL OFFICE**

355 Deadmore St.  
P.O. Box 1688  
Abingdon, VA 24212  
(276) 676-4800  
(276) 676-4899 (fax)

**NORTHERN REGIONAL OFFICE**

13901 Crown Court  
Woodbridge, VA 22193  
(703) 583-3800  
(703) 583-3821 (fax)